A Phenomenographic Investigation of Teacher Conceptions of Student Engagement in Learning

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Abstract

Internationally, educational stakeholders are concerned with the high levels of student disengagement, evidenced by early school leaving, poor student behaviour, and low levels of academic achievement. The solution, student engagement, is a contested concept, theorised in a variety of different ways within academic literature. To further understand this concept, a phenomenographic study was conducted to map secondary school teachers' conceptions of student engagement. Six qualitatively different ways of understanding student engagement were found. This research indicates that teachers do not hold similar understandings of what student engagement means. If the concept of engagement is to become educationally fruitful, the term must be more explicitly defined in educational research and government policy documents to promote shared understandings amongst stakeholder groups.

Introduction

Worldwide, educationists are concerned with student disengagement from school and learning. Disengagement has been cited as a major cause of deviant behaviour at school, truanting, and low academic achievement (Carrington, 2002; Lamb, Walstab, Tesse, Vickers, & Rumberger, 2004). Educationists are especially concerned with correlations between disengagement and early school leaving (Finn & Rock, 1997; Lamb, Dwyer & Wyn, 2000; McMillan & Marks, 2003; Willms, 2003). Much of the research into disengagement has been commissioned by government organisations hoping to gain insight into problems relating to student retention and behaviour. Some educationists consider engaging disengaged pupils to be one of the biggest challenges facing educators, as between 25% (Willms, 2003) and over 66% (Cothran & Ennis, 2000) of students are considered to be disengaged.

Desires to increase engagement have led to interest in measuring and collating data about student engagement, as has been done by organisations including the Organisation for Economic Co-operation and Development (Willms, 2003) and Indiana University (Viadero, 2004). The OECD has used results from the Programme for International Student Assessment to generate statistics about levels of engagement in forty-three member countries (Willms, 2003). Indiana University is currently developing a standardised test to sell to schools, enabling them to measure levels of student engagement and compare their data to district, state, and national benchmarks (Viadero, 2004). In Australia, states such as Queensland have begun to discuss measuring their students' levels of engagement. Education Queensland's (2003) *Middle School Action Plan* states that "Assessment and reporting requirements and accountability for student performance and engagement will be strengthened in state schools" (p. 9), constructing engagement as something schools will have to assess and report.

Defining student engagement

While there is general agreement that student engagement produces positive outcomes, defining the concept is problematic as there is disagreement about what counts as student engagement. Student engagement developed as an academic concept during the 1970s and 1980s, with many early constructs emphasising time-on-task and participation (McKinney, Mason, Perkerson, & Clifford, 1975; Smyth, 1980). Other primarily one-dimensional models then emerged that mainly focused on the psychological or cognitive dimensions of engagement (Ainley, 1993; Miller, Greene, Montalvo, Ravindran, & Nichols, 1996; Newmann, Wehlage, & Lamborn, 1992).

Many academics now view engagement as a multidimensional construct, although many studies investigate only one dimension. Fredericks, Blumenfeld, and Paris (2004) classify 44 engagement studies into behavioural, emotional, and cognitive categories. Behavioural engagement is student participation in academic, social, and extracurricular activities. Emotional engagement is considered to exist when students have positive attitudes and reactions towards school, teachers, learning, and peers. Cognitive engagement is thought to be present when students make personal investment into learning in a focused, strategic, and self-regulating way. Fredricks et al. (2004) argue that all three categories represent important dimensions of engagement and that more multidimensional research must be conducted. They view these categories as non-hierarchical, with each being equally important to student engagement. Preliminary quantitative research using this model has suggested that all three types of engagement cover different aspects of the student experience important to school success and personal development (Blumenfeld, Modell, Bartko, Secada, Fredricks, Friedel, et al., 2005).

However, this is just one multidimensional classification of engagement. Anderson, Christenson, Sinclair, and Lehr (2004, p. 110) divide engagement into four types: behavioural, academic, cognitive, and psychological. While their categories are similar to those described by Fredricks, Blumenfeld, and Paris (2004) above, they use academic engagement to specify time spent doing learning activities as opposed to general behavioural engagement where students may be participating in non-academic pursuits. In their model, psychological engagement encompasses similar aspects to Fredricks et al.'s (2004) emotional engagement.

Some authors propose hierarchical models of engagement, viewing certain types of engagement as more important than others (Finn, 1989; Nystrand & Gamoran, 1991). For example, Finn (1989) puts forward a hierarchical taxonomy based primarily on specific types of behavioural engagement. Students whose behaviours correspond with higher levels in the taxonomy are considered to be 'more' engaged. The first level of engagement occurs when students follow the rules and procedures of the school, the second when they participate within learning environments, and the third when they also take part in social and extracurricular activities associated with the school. Nystrand and Gamoran (1991) create a hierarchical model consisting of procedural and substantive engagement. Procedural engagement loosely correlates to behavioural engagement, occurring when students complete class activities and homework. Substantive engagement describes aspects of psychological and cognitive engagement, happening when students commit to academic study (Nystrand & Gamoran, 1991). In this model, substantive engagement is considered more beneficial for students than procedural engagement as their research correlates it more strongly with student learning.

There are many criticisms of these various models of engagement. The fruitfulness of behavioural engagement is particularly questioned. Some ask if learning outcomes are possible from participation in many common school tasks (Newmann, Wehlage, & Lamborn, 1992). Qualitative studies have shown that many students know how to appear engaged and involved in class work while they are doing other off-task activities (Lankshear & Knobel, 2005; Pope, 2001); physical participation does not appear to guarantee that students are cognitively taking part. Linnenbrink and Pintrich (2003) articulate this idea, explaining, "Simple attention in terms of the students having their eyes on the teacher and not talking to peers may not be enough for learning . . . learning should not just be 'hands on' but also 'minds on'" (p. 124).

Psychological or emotional engagement is also criticised as a stand-alone model. Skinner and Belmont (1993) note that "Educators have plausibly wondered whether it is likely that students who feel good about school may nevertheless fail to learn anything" (pp. 572-573). If the focus at school is on making students feel successful,

there is the possibility that students will not be adequately challenged as the emphasis will be on easily mastered concept where little failure would be anticipated.

Cognitive engagement appears most strongly linked to learning, with research suggesting that while behavioural and psychological engagement may be necessary to facilitate it, hierarchically, it is the most important kind of engagement (Nystrand & Gamoran, 1991). However, more research to investigate the relationship between these types of engagement is needed.

As many educationists are creating school intervention programs (Anderson, Christenson, Sinclair, & Lehr, 2004; Brooks, Todd, Tofflemoyer, & Horner, 2003) and policy reforms (New South Wales Department of Education and Training, 2005; Queensland Government, 2002) to increase engagement, more conceptual clarity is needed if engagement is to be an educationally fruitful concept. Current strategies suggested to increase engagement are diverse including ones designed to increase student participation in extracurricular activities (Finn & Voelkl, 1993; Jordan & Nettles, 1999; O'Brien & Rollefson, 1995), enhance relationships with adults in the school and community (Brewster & Bowen, 2004; Lamborn, Brown, Mounts, & Steinberg, 1992), reform curriculum and pedagogy (Shernoff, Csikszentmihalyi, Schneider, & Shernoff, 2003; Wehlage & Smith, 1992) and individually develop skills students need to be successful (Brooks et al., 2003; Sirin & Rogers-Sirin, 2004). This range of strategies shows the diversity of theories and ideas, many attached to different understandings of engagement.

The research question

While extensive research has investigated student engagement, much of it has been quantitative, focused on the analysis of questionnaires, surveys, and numerical data (Fredricks et al., 2004). Research with a quantitative focus has identified engagement as an area of educational interest, but this type of research cannot be used to explain how people make sense of this concept. Qualitative data on engagement allows researchers to gain a more complete understanding of engagement through participants' own words. While there has been some qualitative research on student engagement from pupil perspectives (Pope, 2001), research on teacher understandings of student engagement appears to be absent from academic literature. As research suggests that teachers have a significant effect on how learning occurs in the classroom (Patrick, 1998), it could prove important to understand their conceptions of what it means for students to be engaged.

This study investigated the research question: What are the qualitatively different conceptions of student engagement held by secondary school teachers? Phenomenography was selected to investigate this question and this approach will be described further in the next section.

An introduction to phenomenography

Phenomenography is a qualitative approach specialising in identifying and mapping the conceptions groups of people hold about the phenomena in their world (Marton, 1981; 1994; 2000). It developed in Goteborg, Sweden in the 1970s and is now used worldwide with large concentrations of phenomenographers located in Sweden, the United Kingdom, Hong Kong, and Australia. By the mid 1990s, over 50 doctoral theses and 1,000 research reports had been completed using the phenomenographic approach, showing its growth in popularity as a qualitative approach (Sandberg, 1997). Phenomenographic studies utilise a range of data collection methods including interviews, written responses, observations, focus groups, drawings, artefacts, and historical documents (Bruce, 1996; Hyrkas & Paunonen-Ilmonen, 2001). However, all data collection processes must allow participants to give open-ended responses that contain sufficient depth so participant conceptions can be identified (Bowden, 1996).

Phenomenography differs from many qualitative approaches as it focuses on the collective understandings of groups and does not make claims about the positions held by individual participants. It does not attempt to assert that participants 'hold' specific conceptions, but instead gathers evidence to illustrate the range of conceptions present within the population under study. Participants may articulate more than one conception as their ways of thinking about a concept frequently change as they discuss it within a range of contexts (Marton & Pong, 2005).

Conceptions identified within data are considered to be representative of understandings within the sample group at the time when the interviews took place (Marton, Runesson, & Tsui, 2004). As access to language changes, the ways conceptions are described are likely to change as well. Therefore, within phenomenography, follow-up interviews are viewed as a new set of data, unable to confirm the original set, even though they are likely to be similar. For this reason, member checking is not standard practice within phenomenographic research (Åkerlind, 2002). As phenomenographers do not use techniques such as member checking to ensure that research has been conducted in the rigorous manner required, each study must outline key theoretical principles and explain data collection methods and processes of analysis to establish validity and reliability.

Theoretical assumptions

Many theoretical aspects of phenomenograpy need clarification as most reported studies do not mention the ontological and epistemological assumptions that underpin them. In phenomenography "metaphysical beliefs and ideas about the nature of reality and . . . knowledge do not come first. What comes first are more specific assumptions and ideas

directly related to the specific character of the empirical research" (Svensson, 1997, p. 164). As phenomenography is not tied to any dominant paradigm, it investigates the ontological status of the phenomenon under study. Phenomenography assumes a non-dualist world; there is no differentiation between an objective 'real' world and a subjective experienced world. The subject and object (phenomenon) are linked, not separate, existing together in a space both subjective and objective.

Most epistemological assumptions are linked to phenomenography's ontology. Svensson (1997, p. 171) lists six fundamental assumptions for our understanding of conceptions, summarised below. Knowledge is assumed to be based on human understanding of the world instead of absolute truths. As people express understandings through conceptions, these become the central form of knowledge. Scientific knowledge cannot be viewed as absolute truth because as human interactions with the world evolve, what counts as 'truth' also shifts. Fruitfulness is considered to be a better criterion for judging scientific knowledge as 'truth' changes. Empirical evidence based on a holistic view of the phenomenon is required to identify conceptions, making descriptions fundamental. Fruitful conceptions are based on differentiation, abstraction, reduction, and comparison of meaning, the four principles fundamental to phenomenographic analysis.

Data collection and analysis

For this study, semi-structured interviews were selected for gathering data as they have been found to generate richer and more useful phenomenographic data than other techniques such as written questionnaires (Bruce, 1996). A sample of twenty secondary school teachers was selected from Education Queensland's Central Coast District. Participants were from three high schools, two located in Rockhampton and one in Yeppoon. The sample was 35% male and 65% female. Each teacher participated in a forty-five to sixty minute interview and these were transcribed verbatim. All utterances were labelled with the name of the participant, number of the interview, and the turn of the conversation according to the method Lankshear and Knobel (2004) recommend for marking qualitative data.

Analysis was conducted using the phenomenographic process described by Marton (1986). The first step was to bracket preconceived ideas. Phenomenographic understandings of bracketing developed from Husserl's concept of the epoché in phenomenology (Ashworth & Lucas, 1998; 2000). Bracketing is the process where researchers set aside preconceived ideas they hold about the phenomenon before examining the data (Marton, 1994).

In this study, several steps were used to minimise researcher subjectivity. First, during data collection and preliminary analysis, no academic literature about student

engagement was read; scholarly reading was limited to methodological papers. Second, analysis was conducted from the second-order perspective (Marton, 1981). The researcher tried to faithfully record and interpret data from the participants' perspectives. Participant data were not judged against the researcher's values or existing knowledge, although they were compared with other participant data. Third, no codes were generated prior to looking at the data; all were developed from the transcripts using participant words.

After taking steps to bracket preconceived ideas, hard copies of the transcripts were scrutinised. After several readings of the data, 'utterances found to be of interest for the question being investigated are selected and marked' (Marton, 1986, p. 42). Sjostrom and Dahlgren (2002) recommend basing judgments on three indicators:

- 1) Frequency how often an idea is articulated
- 2) Position where the statement is positioned; often the most significant elements are found in the introductory parts of an answer
- 3) Pregnancy when participants explicitly emphasise that certain aspects are more important than others (pp. 341-342).

After preliminary analysis, the most frequently appearing ideas were identified for further examination. For example, multiple participants made similar statements relating engagement to student interest and enjoyment. Once frequency had been established, typical passages of data related to this theme were examined for pregnancy and position. For example, Emily, describing a time her class engaged in a current events based activity, explained:

I think because they were overwhelmingly passionately interested in it; their mind was there. That was because it was an opinionated piece and it was topical; for them that was topical. For them, what I thought was interesting and topical was not necessarily what they thought, so I think it was basically looking at what they wanted to do. (E1.024)

Betty also talked about student interest leading to engagement. She stated:

You have to have really structured lessons for boys and they have to be interesting. And I know it's hard as a teacher, but you have to have interesting lessons otherwise they're not going to be engaged at all. But at the same time, they like variety, and you can't keep doing the same thing. (BT1.020)

Caitlyn described why student engagement occurred in her classroom saying, "I guess either they are enjoying what they are doing, you know, having fun, or something has really interested them". (CA1.064)

When examining these three passages, all three participants mentioned student interest within the first sentence of their statement, showing the significance of the idea within their response. Within these statements, there are also examples of pregnancy where participants clarify the meaning of their statements, emphasising key points. For example, Betty mentions that without interesting lessons, students will fail to engage.

While these representative passages did suggest a similar conception of engagement and fit Sjostrom and Dahlgren's (2002) criteria, before data could be pulled from their contexts to form *a pool of meaning*, or grouping of similar conceptions, two steps were required:

- Data needed to be analysed in context to ensure that the participant's meaning was accurately represented
- 2) Data excerpts needed to be proved representative of a larger section of data (Irvin, 2005, p. 114)

Once these two criteria had been met, data were removed from their context to form a *pool of meaning* (Marton, 1986). These pools of meaning were carefully compared and contrasted and criteria were formed in association with each pool. Pools with many similar criteria combined, while others split as finer distinctions between the data became apparent. Once criteria were established for each pool and the meanings stabilised, the collective meaning of the pool was abstracted to form a *category of description* (Marton, 1986). Each of the six categories of description found in this study represented a qualitatively different way of experiencing the phenomenon.

Once the six categories of description were established, the categories were hierarchically organised into the *outcome space*, the major forum for reporting phenomenographic results. The outcome space is considered to be a 'space of variation' "representing all possible ways of experiencing the phenomenon in question, at this particular point in time, for the population represented by the sample group" (Åkerlind, 2002, p. 2).

These relationships are primarily defined by similarities and differences (Marton & Saljo, 1997) and can be ordered in relation to a given criteria or by complexity (Marton, 1994). The outcome space is considered to be synonymous with the phenomenon as all of its potential meanings are represented (Marton, 2000).

The creation of the outcome space relies on a balance between allowing the structure to emerge from the data and relying on the professional judgments of the researcher (Walsh, 2000). Bracketing no longer occurs during this step as creating an outcome space "allows the phenomenographic researcher not only to list people's conceptions in the form of categories of description but also the researcher's interpretation of the relationship between them" (Yu, 2003, p. 5).

The researcher is allowed to compare the study's findings with other data to create a 'logical' model of how the categories relate to each other. In this study, pregnancy (Sjostrom and Dahlgren, 2002) was relied on heavily to order conceptions; categories placed higher in the hierarchy often included participant statements critiquing lower conceptions.

Results

This study identified six qualitatively different conceptions of engagement in learning: These include categories suggesting student engagement is:

- participating in classroom activities and following school rules
- being interested in and enjoying participation in what happens at school
- being motivated and confident in participation in what happens at school
- being involved by thinking
- purposefully learning to reach life goals
- owning and valuing learning.

These categories have been titled: *Behaving, Enjoying, Being motivated, Thinking, Seeing purpose*, and *Owning*. While the first category contains primarily behavioural understandings of engagement, the second two, Enjoying and Being motivated, focus more on psychological aspects of engagement. In the final three categories, emphasis is placed on cognitive aspects of student engagement. In the following sections, each of these categories will be explained and illustrated with data taken from the study.

Category 1 - Behaving

In this category, engagement is conceptualised as student participation in classroom activities and adherence to school rules. Engaged students are portrayed as content with school. Because they are following the rules, engaged students are not disrupting the participation of others. Within this category, it is assumed that students learn when they partake in the teacher-set activities, displaying characteristics of behavioural engagement.

Emily, for example, described an engaged student as:

Someone who comes willing to participate in what you've got planned or in the education process, in the classroom process. Someone who is participating in discussions, putting forward ideas. Taking the notes that you need to take, working within the time frame ... to get the certain amount of work or um assessment or whatever done in that prescribed time. (E1.051)

Here, key elements of this type of engagement are outlined: the students participate in 'what you've got planned,' 'work within the time frame,' and 'get the certain amount of work ... done.'

Another participant, Jenny, defined engaged students as:

listening and they are answering questions. They are behaving properly. They are not tuned out; they are sort of doing what you ask them to do, all the usual things you like to see in a student. (JE1.100)

She also focused on participation and behaviour; these students are 'doing what you ask' and are 'behaving properly.' In this category, teachers identify who is and is not engaged. Criteria for engagement are teacher-set; participants look for the things they 'like to see in a student.'

Having students who are 'behaving properly' is seen as particularly important in this category because student behaviour can affect the participation of the whole class. Betty told of a time where she had five disruptive boys 'engaged' in making jewellery (referred to as 'bling, bling') while the rest of the class completed seatwork. When reflecting on the situation, she stated:

they created their bling bling from cardboard, glitter and pipe cleaners. Once I have those five boys engaged, I can then actually teach the rest of the class, but if those five boys aren't engaged, there is no learning happening in my lesson. So in that particular lesson where my boys ... designed their bling bling and created it, I was actually able to do two sheets of work with the rest of the class, whereas normally, I would have to chase those boys around the classroom, telling them not to throw things, sit down. So that's basically my story of engagement ... even though it's a tiny step and they only made, you know, jewellery, to me it was good because they sat down in a group. They didn't move. They didn't say anything nasty to any other people in the group and they created their jewellery and they were totally engaged in that activity the whole time. And then afterwards, I asked politely, "Guys,

could you stay back and help me clean up?" and they did. Normally they wouldn't do that; they'd tell me to f-off and run away. (BT1.002)

In this anecdote, the boys were engaged when participating in the activity and following basic classroom norms (not saying anything nasty to others, sitting down, not throwing things, not telling her to f-off). Having this group engaged led to increased participation from the rest of the class; the other students were able to 'do two sheets of work' because she was not 'chasing those boys around the classroom.' This example illustrates the connection suggested in this category between engagement and behaviour; when the boys were engaged in the activity, they were no longer a management problem. They were content; Betty explained, "I think they were just thinking, 'yeah, we get to glue crap together and put glitter on it' instead of being concerned that they were doing something different to the rest of the class" (BT1.068). Teachers do not appear worried about whether activities that 'engage' this type of students are educationally relevant as long as pupils meet behavioural outcomes.

In this category, learning is seen as occurring through participation. Betty explained, "So if you are engaged, you are learning, subconsciously you are learning, whether you are aware of it or not" (BT1.176). This statement reflects the implicit nature of learning within this category; here, student learning is very prescribed and teacher-directed.

Category 2 - Enjoying

In this category, student engagement is pupil interest and enjoyment when participating in what happens at school. While behavioural aspects of engagement like participation are still valued within this category, psychological aspects of the concept are also considered important. For example, Hope defined engagement as "being interested in what is going on in the classroom or wherever it's being taught. Being interested and being an active participant in what is going on" (H1.098). Like Category 1 (Behaving), this definition constructs the process of teaching and learning in a traditional sense; something is 'going on in the classroom' and 'being taught' while students are 'active participants.' However, students are also 'being interested,' a key difference as in the previous category student interest mattered little as long as pupils were participating and behaving.

While Category 1 (Behaving) suggests participation is expected from students, here participation is seen as contingent on interesting lessons. Lily explained:

I don't think that students will participate in something they are not interested in or that they don't feel that they can use... I mean kids are very egocentric, you know what I mean? It is about me. It is all about me. (L1.012)

Engagement is still 'participation' but lessons must incorporate things pupils 'can use' or find 'interesting' for students to be expected to participate. Students are joining in not just because they are content and compliant as they were in the previous category.

Teachers suggests tasks must also be enjoyable for participation to occur. For example, Caitlyn described a game she played with a music class when describing a moment of engagement, saying:

There's smiles all round; they're enjoying it. There's a good feeling across the whole class, me included, the whole room. It is just great; we were all there playing, participating at the same time, just absolutely fabulous. (CA1.004)

While the focus is still on participation, here students are participating because 'they're enjoying it' as opposed to in the previous category where they were perceived as engaging because they were willing to 'go with the flow' (BH1.038) and do what they were asked to do. When engagement is based on students' interests and involves 'fun' activities, students appear more willing to participate in teacher-set tasks. The behaviour problems commonly described in Category 1 (Behaving) appear to decrease, leading to 'good feelings across the whole class.'

As in the first category, learning remains implicit and is assumed to occur because students are taking part in teacher-set activities. These tasks may or may not have an academic focus; because interest and enjoyment are the criteria, a wide range of activities can be engaging. As Christine stated:

I don't think it (higher order thinking) has to be going on . . . some people can be extremely engaged in watching a football game, but there may not be any higher order thinking going on, but they're still engaged. So I think every kid should be given the opportunity to be engaged in higher order thinking to the best of their ability, but that will be different things for different kids. . . . And some kids need that higher order thinking and if they don't get it, they are extremely bored. . . . Other kids, they want more practical, more practical involvement I guess. I think it just really depends on the learning style of the student and how they are, whatever it is they're doing, however they're feeling at that particular time. (CH1.082- CH1.086)

Here Christine explained that people can be engaged in lots of activities such as 'watching a football game' where no 'higher order thinking' is going on. She articulated that some kids 'want more practical involvement' instead of 'higher order thinking' although some need this to be engaged. 'Different things' are needed for 'different

kids.' As long as students are participating and enjoying what they are doing, a mix of behavioural and psychological aspects of engagement, they were thought to be engaged and considered to be learning.

Category 3 - Being motivated

In this category, student engagement is pupil motivation to participate and confidence in their ability to succeed. While behavioural indicators like participation are still considered important, within this category psychological aspects of engagement are considered essential for generating motivation and therefore engagement. Students are seen as expecting rewards and validation from engagement, relying more heavily on extrinsic than intrinsic motivation. While most teachers represented in this category still describe engagement as 'doing,' 'working,' and 'participating,' some mention learning more explicitly as an outcome of these actions.

Extrinsic motivators are seen as especially powerful for motivating students. For example, Mary explained:

You don't get the [right] attitude towards anything if you never get any rewards along the way there. I wouldn't come to work if I wasn't paid and I think it's the same with kids. They don't get paid; they don't get any rewards from being at school. They just get into trouble all day every day and it becomes a vicious cycle . . . (MR1.076)

This passage is representative, showing the common assumption within this category that people are only motivated to do things when incentives are offered, making rewards and validation important parts of student engagement. Participants suggest that because 'disengaged' students don't 'get paid' at school, they lack motivation to participate.

Within this category, success, acceptance, and positive reinforcement are also considered to be powerful motivators. As Jill explained, "if it makes you feel good to do something, you want to do it over and over again, because that's just human nature. If it makes you feel good, you want more" (JL1.298). Students were willing to participate 'over and over again' if it made them 'feel good'. Confidence is also considered important because, as Lily stated, when students "become isolated so they are not confident in what they want to say, they do not feel that they can participate well" (L1.032). Lack of confidence is seen as leading to low self-efficacy about their ability to 'participate well.'

In this category, learning becomes discussed more explicitly despite a continuing focus on participation. For example, Jill talked about learning instead of participation when discussing the role of confidence in student engagement:

The high flying girls engage more because they have a confidence in their ability to achieve and they have a confidence with the other students in the class and a certain confidence with the teacher and I think that makes them feel more comfortable to engage in learning, so I think that definitely drives them to want to learn. (JL1.064)

By having a level of self, peer, and teacher acceptance, students are considered more willing to engage because they 'feel more comfortable.' Here, Jill spoke specifically about how the girls 'engage in learning' and 'want to learn' demonstrating an emerging focus on learning instead of participation in this category.

Category 4 - Thinking

In this category, student engagement is being involved by thinking. Here, participants assume that students can and will engage in teacher-created learning activities as long as work is at the correct intellectual level. Students are seen as possessing knowledge and skills that enable them to learn, unlike in the previous categories where the focus is more on student behaviour than ability. Here, the importance of student cognitive engagement is acknowledged and participation is seen in a much broader way than in previous categories.

For example, George described engagement as occurring when students "are not simply learning what needs to be taught. They are thinking about what they are learning" (G1.067). While in previous categories learning was generally implicit, seen as an outcome of a student's participation in, enjoyment of, or motivation to complete teacher-set tasks, in this category learning is discussed explicitly and is not directly tied to participation. Students are seen as wanting to know things, unlike Category 3 (Being motivated) where they were learning 'what needs to be taught' to receive extrinsic rewards.

Here, engagement is no longer determined by observing physical behaviours. While participation is still viewed as important, it takes a less tangible, physical state; students do not have to be 'doing' observable things to be thinking and participating. For example, William used a simile to describe engagement:

The engagement term, it's a little bit like if you go to the toilet and it is engaged. Well, it means it is occupied. There's someone in there. The same with students. If they are engaged, they are occupied. It is not just a matter of being occupied in doing something; it means that their minds are occupied with the task at hand. Now it could be an easy task; it could be a very difficult task, but their minds are occupied with that task. To me, that is engagement. (WM1.020)

He stated that engagement is a process occurring internally within the mind. While he used the term 'occupied,' similar to the language used in Category 1 (Behaving), he meant mentally occupied, not physically. While teachers still supply these 'easy' or 'difficult' tasks, students engage because activities provide them with something mentally stimulating that 'occupies' their mind.

Later in the interview he clarified that physical signs of being 'occupied' are not necessary, stating:

A person engaged does not necessarily need to be doing – physically doing anything. They don't need to be writing; they don't need to be reading, they don't. Those things don't necessarily need to be happening. It is what is going on upstairs. It is what is going on in their mind. (WM1.060)

In this category, teachers consider students to be engaged based on "what is going on upstairs" not on physical behaviours indicating that "it's a cognitive thing" (WM1.064).

These representative passages of data signify a major shift from previous categories as participants no longer rely on visible actions to determine student engagement. Students are considered to want to know and learn; their motivation is less tied to rewards and validation than in previous categories. While students still participate to engage, teachers are aware that students may participate in a variety of ways. Learning is discussed in explicit terms and is considered to be the result of student thinking, evidenced by increased student understanding and achievement.

Category 5 - Seeing purpose

In this category, student engagement is pupils purposefully learning to achieve life goals. Teachers suggest that students must be aware of the reasons why they are learning to fully engage. The emphasis here is on student cognitive engagement and school learning must be aligned with student goals and purposes. For example, Joseph explained how a sense of purpose can completely change a student's attitude towards learning and schooling:

We had a girl who . . . in grade 9 was just a shocker, and there are a whole lot of reasons why, family background and all these things. Missed a substantial part of the learning through truancy and bad behaviour and suspensions and all this stuff, but come Year 11 is one of the highest achieving students that we have got. A couple of things have changed in her life obviously, but in a sense, she has moved into a different family background and home, but she had answered some

questions for herself about the value and purpose of why she was in a classroom and actually addressed that over that Year 10 to 11 period. Once she had come to terms with why she was here, what her purpose was, then it was like her choice to be in all these classes and she understood the reason behind her having to hand in or write this or do this bit of homework. Everything had its pointful purpose. Kids that don't have that, they don't get engaged because there is no point in it; they don't see the link to things. (JS1.030)

Teachers identify that students must see the purpose behind what they are learning; those who do not fail to 'get engaged because there is no point in it.' In Joseph's example, the student did not engage until she had 'come to terms with why she was here' and 'what her purpose was.' After establishing a purpose for her learning, she was able to see how what she was being asked to do at school connected with her future goals. Teachers are aware that until students can see the purpose behind schooling and what they are doing within their classes, they are unlikely to engage.

Participants realise that students become engaged when tasks have clear purpose. For example, George, discussing a media project he completed with his class reiterated the same idea saying, "the students really engaged because they saw purpose in what they were doing. It wasn't just an assignment; it actually had some sort of meaning" (G1.004). Teachers realise they must transform learning activities to make them more than 'just an assignment.'

Participants suggest that many students disengage because they do not see the relevance of the learning. For example, Hope spoke of her own high school experience in maths:

. . . [I] was not ever engaged in maths. Couldn't stand it, so I just didn't learn, just didn't. Wasn't in the least bit bothered. And it didn't matter how wonderful the teacher was or how exciting the lesson was, if I didn't want to learn it, I wasn't going to. I couldn't see the point in it. I could not see the point. I felt that if I could add up, subtract, multiply, and divide, as far as I was concerned, that was all I was going to need in my life, and it is all I've ever needed in my life . . . (H1.102)

Hope explained she did not 'see the point in it' and did not engage, despite teacher efforts to make the lessons exciting. It was not a 'subject she liked,' so she 'just didn't learn.' While learning is talked about explicitly in this category, when not connected to a purpose meaningful for the student, learning is considered unlikely to occur despite teacher efforts to make activities interesting.

Category 6 - Owning

In this category, student engagement is owning and valuing learning. Engaged students are seen as exercising a high level of control over their learning and as intrinsically motivated. For example, Diane explained engagement was "owning the stuff that they do and valuing it and, you know, doing it because they value it and own it" (D1.062). Teachers are aware that students must have significant control over their learning in order to engage at a high level and focus almost exclusively on cognitive aspects of engagement. While in previous categories teachers are concerned with the quantity of engagement (how many students are engaged), here teachers are more interested in the quality of student engagement.

Student engagement is considered to be a personal relationship with learning. For example, Mary explained:

. . . ultimately it gets back to what I see as the most vital ingredient of education and that is relationships. Now an engagement traditionally means a close tie between two people who have promised their lives to each other . . . And if I could think that students could love their education so much that they become engaged with themselves in a process of lifelong learning, then that's great. (MR1.126)

She understood engagement to be a 'relationship,' a 'close tie' between the person and learning, caused because they 'love their education.' Because students value education, they will become involved 'in a process of lifelong learning.' Lifelong learning is not considered in previous categories where participants appear to associate learning primarily with formal schooling.

Values are discussed differently here than in Category 3 (Being motivated) where extrinsic motivation and confidence are paramount. As Joseph discussed, there is a difference between values that you have been given by parents and peers and values that you internalise and make your own:

You can be engaged because someone made you engaged indirectly. My family influenced me in this way to value this and that sort of stuff and they may be involved. But truly engaged and owning the learning and taking from it the things that they want and see that they need sort of thing, that is a higher level I think. You can see people engaged with the perception of their head's down doing this and it is that idea, but really drawing it into their core and understanding is going to have to happen because they are choosing it to happen. (JS1.032)

Here, students engage, not because their friends and 'family influenced' them to 'value this,' but because they intrinsically value learning. Unlike previous categories where student engagement is viewed in binary terms of engaged or disengaged, here teachers are aware that there are varying levels of engagement. Students considered engaged are seen as being potentially engaged at a 'higher level.'

Learning is the explicit goal of engagement in this category for both students and teachers. As Mary stated, "An engaged student is someone who wants to be here, someone who wants to be learning. Your lifelong learner, engaged student, lifelong learner" (MR 1.110). She suggested that because an engaged student is "someone who wants to be learning", they will continue formally or informally after leaving school. Unlike Category 5 (Seeing purpose), students engage for the love of learning and will continue learning indefinitely as it is not tied to a specific purpose or outcome.

Discussion and implications

The outcome space of this study has several key findings relating to student engagement in learning. Firstly, as the categories within the outcome space ascend, teachers become aware of behavioural, then psychological, and finally cognitive aspects of engagement. These data further support that cognitive, psychological, and behavioural types of engagement have a hierarchical relationship like that suggested by Nystrand and Gamoran's (1991) research.

Secondly, data from this study also suggest that not all teacher conceptions of student engagement are focused on engagement in learning. Some appear to centre instead on participation, or engaging students in schooling. For example, in Category 1 (Behaving), student participation in school activities and procedures seems to be the focus of teacher understandings. In these categories teachers assume that "if you are engaged, you are learning, subconsciously you are learning, whether you are aware of it or not" (BT1.176). As learning is considered implicit, learning outcomes are not a direct focus of all activities designed to 'engage' students, evidenced through examples such as Betty's "bling bling" activity where she had "no idea" of the intended learning outcomes (BT1.034).

These categories suggest that behavioural engagement may have a haphazard and often implicit relationship with learning, contributing to the body of literature questioning the assumed correlation between participation and learning (Lankshear & Knobel, 2005; Linnenbrink & Pintrich, 2003; Pope, 2001). While student learning begins to enter participant awareness in Categories 2 (Enjoying) and 3 (Being motivated), the focus in these categories remains primarily on getting students to participate in school and classroom activities. These types of student engagement may be considered engagement in schooling instead of in learning.

As categories ascend, participants are more aware of the importance of student learning. Student learning becomes an explicit focus in the final three categories. These later categories are seen as being "more complex and powerful than the others" (Bruce 1996, Chapter 7, p. 5) as they represent a wider awareness of the parts that make up student engagement and a deeper understanding of the importance of student learning.

The findings of this study have implications for teacher education, educational policy, and future research. This study shows that there cannot be any 'assumed' shared knowledge about student engagement among academics or teachers. The variation present within literature reviewed and empirical data examined shows the diverse range of meanings attached to the concept. As shared meaning cannot be assumed, the concept of student engagement must be explicitly defined within academic research and government documents to avoid misunderstandings and misinterpretations.

Conclusion

The research conducted in this study appears to confirm Mary's remark that "engagement is a widely overused, abused, and misused word" that has "become another trendy 'in' word" (MR1.124; 1.126). Until the term 'student engagement' can lose this status, it will fail to be taken seriously by many professional educators.

A phenomenographic approach, like that taken in this study, can only be used to create theoretical models; all other types of inquiry are outside its scope, making its versatility limited. To further examine the empirical results of this study, another approach would be needed. Future research should continue to investigate the relationship between behavioural, psychological, and cognitive aspects of engagement and should explore how teacher conceptions are translated into classroom practices. It would also be useful to investigate conceptions held by other educational stakeholders. This study suggests that future work on student engagement must aim to increase conceptual clarity instead of just adding new ideas to an already crowded construct.

Student engagement remains a concept with largely untapped potential (Fredricks et al., 2004). Synchronising the ways it is talked about and understood by educational stakeholders would increase its usefulness. This study has been one step towards changing the concept of student engagement from "an elusive one [concept] that requires further clarification" (Butler-Kisber & Portelli, 2003, p. 207) to a useful concept for talking about student experiences and learning.

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